



DERWENT-ACC-NO: 2004-786658

DERWENT-WEEK: 200557

COPYRIGHT 2005 DERWENT INFORMATION LTD

TITLE: Heat exchanger for a combined circuit with a compressor cooler and rankine cycle for a motor vehicle climate unit has a controllable ratio of cooling and condenser functions

INVENTOR: INABA, A; SASAKI, M ; TORIGOE, E ; YAMANAKA, T

PATENT-ASSIGNEE: DENSO CORP[NPDE] , NIPPONDENSO CO LTD[NPDE] , INABA A[INABI] , SASAKI M[SASAI] , TORIGOE E[TORII] , YAMANAKA T[YAMAI]

PRIORITY-DATA: 2003JP-0122280 (April 25, 2003)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6935129 B2	August 30, 2005	N/A	000	F25B 027/00
DE 1004019668 A1	November 11, 2004	N/A	026	F25B 001/00
FR 2855252 A1	November 26, 2004	N/A	000	F24F 012/00
JP 2004322914 A	November 18, 2004	N/A	016	B60H 001/32
US 20040237576 A1	December 2, 2004	N/A	000	F25B 001/00

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 6935129B2	N/A	2004US-0829996	April 22, 2004
DE1004019668A1	N/A	2004DE-A019668	April 22, 2004
FR 2855252A1	N/A	2004FR-0004339	April 23, 2004
JP2004322914A	N/A	2003JP-0122280	April 25, 2003
US20040237576A1	N/A	2004US-0829996	April 22, 2004

INT-CL B60H001/32, F24F012/00 , F25B001/00 , F25B027/00 , F25B027/02 , F25B039/02 ,
(IPC): F25B039/04

ABSTRACTED-PUB-NO: DE1004019668A

BASIC-ABSTRACT:

NOVELTY - A heat exchanger for a combined circuit system comprises a vapor compressor cooling circuit with compressor (1) cooler (2), evaporator (5), a Rankine cycle and a condenser (12). Cold medium and fluid flow around the core section of the heat exchanger and a unit alters the ratio between the exchanger's cooling and condensing section functions.

DETAILED DESCRIPTION - An **INDEPENDENT CLAIM** is also included for a combined circuit system with an integrated cooling and condensing function as above.

USE - As a heat exchanger for a combined circuit system and such a system (claimed) for a motor vehicle climate unit.

ADVANTAGE - Energy consumption by the compressor is effectively reduced and circuit efficiency is increased.

DESCRIPTION OF DRAWING(S) - A block diagram of the unit is shown.

compressor 1

cooler 2

evaporator 5

heater 6

condenser 12

CHOSEN-DRAWING: Dwg. 1/20

TITLE-TERMS: HEAT EXCHANGE COMBINATION CIRCUIT COMPRESSOR COOLING
RANKINE CYCLE MOTOR VEHICLE CLIMATE UNIT CONTROL RATIO
COOLING CONDENSER FUNCTION

DERWENT-CLASS: Q75 X22 X27

EPI-CODES: X22-J02; X27-F;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2004-620023